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First Named Inventor:	RAJAN, SUNDAR J.		
Application No.:	09/937587	Confirmation No.:	2684
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Title:	ADHESION-ENHANCING SURFACES FOR MARKING MATERIALS		

SECOND AMENDED BRIEF ON APPEAL

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March 2, 2009 /Amber Veenendaal/
Date Signed by: Amber Veenendaal

Dear Sir:

In reply to the Notice of Non-Compliant Appeal Brief dated February 4, 2009, this Amended Brief on Appeal is being submitted to provide a substitute Claims Appendix that now reflects the amendments entered since this Appeal Brief was originally filed.

☒ If necessary, charge any required fee, or credit any overpayment to Deposit Account No. 13-3723.

Respectfully submitted,

March 2, 2009
Date

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CLAIMS APPENDIX

1. (previously presented) A signage article comprising:

a substrate comprising a noncellulosic organic polymeric surface,

a surface exposed to the outdoors comprising a radiation cured coating crosslinked by exposure to radiation selected from the group consisting of ultraviolet radiation, visible radiation, electron beam radiation, and combinations thereof disposed on the noncellulosic organic polymeric surface; and

a marking material disposed on the radiation cured coating, wherein the marking material is not substantially removed from the signage article upon wiping the marking material with gasoline for five cycles.

2. (original) The signage article of claim 1 wherein the substrate comprising a noncellulosic organic polymeric surface comprises retroreflective sheeting.

3. (original) The signage article of claim 2 wherein the retroreflective sheeting is part of a validation sticker.

4. (original) The signage article of claim 1 wherein the marking material comprises a colorant and a binder and the binder comprises a polymer selected from the group of a polyester, a vinyl, a polyolefin, a polyvinyl acetal, an alkyl or aryl substituted acrylate or methacrylate, a copolymer of ethylene or propylene with acrylic acid, methacrylic acid, or vinyl acetate, and combinations thereof.

5-6 (cancelled)

7. (previously presented) The signage article of claim 1 wherein the radiation cured coating is derived from a UV-curable composition that comprises an acrylate.

8. (original) The signage article of claim 7 wherein the acrylate comprises an aliphatic acrylated urethane.

9. (original) The signage article of claim 1 wherein the marking material is not substantially removed upon wiping the marking material with gasoline for ten cycles.

10. (original) The signage article of claim 8 wherein the marking material is not substantially removed upon wiping the marking material with gasoline for twenty-five cycles.

11. (original) The signage article of claim 1 wherein the marking material is not substantially removed upon abrading the marking material for 1000 scrub cycles.

12. (original) The signage article of claim 1 wherein the marking material is not substantially removed upon applying a pressure sensitive adhesive-coated tape to the marking material under thumb pressure and removing it.

13. (original) The signage article of claim 1 wherein the radiation cured coating is not substantially removed upon applying a pressure sensitive adhesive-coated tape to the radiation cured coating under thumb pressure and removing it.

14. (original) The signage article of claim 1 wherein the radiation cured coating is not substantially removed upon wiping the radiation cured coating with gasoline for five cycles.

15. (original) The signage article of claim 1 wherein the radiation cured coating is not substantially removed upon abrading the radiation cured coating for 1000 scrub cycles.

16. (original) The signage article of claim 1 wherein the radiation cured coating is pattern coated.

17. (original) The signage article of claim 1 which does not include a protective coating over the marking material.

18. (previously presented) A signage article comprising:

a retroreflective sheeting comprising an organic polymeric surface;

a surface exposed to the outdoors comprising a radiation cured coating disposed on the organic polymeric surface wherein the coating comprises an acrylate and the coating is crosslinked by exposure to radiation selected from the group consisting of ultraviolet radiation, visible radiation, electron beam radiation, and combinations thereof;

a marking material disposed on the radiation cured coating; wherein the marking material is not substantially removed from the signage article upon wiping the marking material with gasoline for five cycles.

19. (previously presented) The signage article of claim 18 wherein the coating comprises an aliphatic acrylated urethane.

20. (withdrawn) A method of making a signage article comprising:

providing a substrate comprising a noncellulosic organic polymeric surface and a radiation cured coating disposed thereon; and

applying a marking material to the radiation cured coating using a technique selected from the group of eletrostatic printing, ion deposition printing, magnetographic printing, inkjet printing, letter press printing, offset printing, and gravure printing.

21. (withdrawn) The method of claim 20 wherein the marking material is not substantially removed upon wiping the marking material with gasoline for five cycles.

22. (withdrawn) The method of claim 20 wherein the signage article does not include a protective coating over the marking material.

23. (withdrawn) The method of claim 20 wherein the substrate comprising a noncellulosic organic polymeric surface comprises retroreflective sheeting

24. (withdrawn) The method of claim 20 wherein the marking material comprises a colorant and a binder comprising a polymer selected from the group of a polyester, a vinyl, a polyolefin, a polyvinyl acetal, an alkyl or aryl substituted acrylate or methacrylate.
a copolymer of ethylene or propylene with acrylic acid, methacrylic acid, or vinyl acetate, and combinations thereof.

25. (withdrawn) The method of claim 20 wherein the radiation cured coating is derived from an UV-curable composition.

26. (withdrawn) A method of making a signage article comprising:

providing a substrate comprising a noncellulosic organic polymeric surface; and

applying a marking material to the noncellulosic organic polymeric surface using a technique selected from the group of electrophotographic printing and gravure printing; wherein the marking material is not substantially removed upon wiping the marking material with gasoline for five cycles.

27. (withdrawn) The method of claim 26 wherein the signage article does not include a protective coating over the marking material.

28. (withdrawn) The method of claim 26 wherein the substrate comprising a noncellulosic organic polymeric surface is retroreflective sheeting.

29. (withdrawn) The method of claim 26 wherein the noncellulosic organic polymeric surface comprises a radiation cured coating onto which the marking material is applied.

30. (withdrawn) A method of making a signage article comprising:

providing a substrate comprising a noncellulosic organic polymeric surface; and

applying a marking material to the noncellulosic organic polymeric surface using a technique selected from the group of letter press printing and offset press printing;

wherein the marking material is not substantially removed upon wiping the marking material with gasoline for five cycles; and

further wherein the signage article does not include a protective cover layer.

31. (withdrawn) The method of claim 30 wherein the substrate comprising a noncellulosic organic polymeric surface is retroreflective sheeting.

32. (withdrawn) The method of claim 30 wherein the organic polymeric surface comprises a radiation cured coating onto which the marking material is applied.

33. (withdrawn) The method of claim 32 wherein the radiation cured coating is derived from an UV-curable composition.

34. (withdrawn) A method of making a validation sticker, the method comprising:

providing a validation sticker comprising a noncellulosic organic polymeric surface; and

screen printing a marking material onto the noncellulosic organic polymeric surface;

wherein the marking material is not substantially removed upon wiping the marking material with gasoline for five cycles; and

further wherein the validation sticker does not include a protective cover layer.

35. (withdrawn) A method of making a signage article comprising:

providing a substrate comprising a noncellulosic organic polymeric surface having a radiation cured coating thereon; and

screen printing a marking material onto the radiation cured coating;

wherein the marking material is not substantially removed upon wiping the marking material with gasoline for five cycles; and

further wherein the signage article does not include a protective cover layer.

36. (withdrawn) A method of making a signage article comprising:

providing a substrate comprising a noncellulosic organic polymeric surface having a radiation cured coating thereon; and

applying a marking material onto the radiation cured coating using thermal mass transfer printing;

wherein the marking material is not substantially removed upon wiping the marking material with gasoline for five cycles.

37. (previously presented) The signage article of claim 1 wherein the article is selected from the group consisting of a labeling product, a product authentication article, a window sticker, an inspection sticker, a parking permit, an expiration sticker, a license plate, a traffic sign, and a road marking.